

SCHEDULING OF CUTTING OR THINNING OPERATIONS IN
IMMATURE STANDS OF PONDEROSA PINE TO MINIMIZE
DAMAGE BY THE OREGON PINE IPS

By

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Outbreaks of the Oregon pine ips Ips oregoni (Richh.) frequently follow logging and thinning operations in ponderosa pine stands of the Pacific Northwest causing widespread damage to immature stands and the tops of larger trees. The attacks in the tops of larger trees often attract the western pine beetle or the mountain pine beetle. These aggressive beetles quickly kill the remainder of the tree and frequently attack the surrounding green stand.

The Oregon ips attacks fresh slash throughout the warm season. Broods develop rapidly. Two to five generations may emerge especially if conditions are favorable. These new adults attack the green stand killing in groups ranging from few to many hundreds of trees. Damage is especially severe under drought conditions.

From studies^{1/} made in Central Oregon it was found that adults emerging from slash cut early in the season were more destructive to the green stand than those emerging from slash cut later in the season.

^{1/} Buckhorn, W. J. Preliminary Report on Relation to Logging Operations to Outbreaks of Ips oregoni in Ponderosa Pine Forests. Forest Insect Laboratory, 445 U. S. Court House, Portland, Oregon, July 8. 1942.

Broods emerging from slash laid down from February to July caused 95.7 percent of the damage while those emerging from slash laid down from August to January accounted for 4.3 percent of the stand damage.

The distribution of this damage by month of cutting is presented in the following table.

<u>Month of Cutting</u>	<u>Percent of Damage</u>	<u>Month of Cutting</u>	<u>Percent of Damage</u>
Feb.	10.4	Aug.	1.0
March	18.2	Sept.	.7
April	19.3	Oct.	.3
May	24.2	Nov.	.3
June	18.1	Dec.	.7
July	<u>5.5</u>	Jan.	<u>1.3</u>
Total	95.7		4.3 = 100 Percent

By scheduling logging or thinning operations to coincide with the relatively safe period of August through January, and avoiding the hazardous period of February through July, losses to the residual stand by the Oregon pine ips may be reduced to the minimum.

Seasonal weather conditions may cause some deviation from the above dates and further variations may be encountered at the extremes in the range of this insect.